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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,893	08/09/2000	Suguru Tokita	ZU-392	5309

7590

06/04/2003

Sherman & Shalloway
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Alexandria, VA 22314

EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 06/04/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/601,893	Applicant(s) TOKITA ET AL.	
	Examiner John L. Goff	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Amendment B filed on 3/18/03. The previous 35 U.S.C. 112 rejections have been overcome.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/18/03 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blunt (U.S. Patent 3,475,369) in view of either Roberts (U.S. Patent 3,328,362) or Tomita et al. (U.S. Patent 5,252,677).

Blunt is directed to a resin composition useful as a coating and/or adhesive material for metal, plastic, and cellulosic substrates. Blunt teaches the composition comprises solid particles

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of an olefin copolymer dispersed in an organic solvent. Blunt teaches the copolymer comprises a first α -olefin of a crystallizable copolymer such as ethylene and a second α -olefin having 2 to 20 carbon atoms wherein the second α -olefin is present in an amount of 2 to 25 mole percent and the copolymer is prepared with a metallocene catalyst. Blunt teaches the copolymer has a viscosity of 1 to 50 and a crystallinity less than 90%. Blunt teaches the solid particles have a size of less than 5 microns, and the dispersion generally has a solids content of 10-30% (Column 1 lines 23-25 and Column 2, lines 3-19 and Column 3, lines 3-6 and Column 4, lines 1-4, 13-16, and 26-31 and Column 6, lines 28-49 and 74-75 and Column 7, lines 10-19 and Column 11, lines 1-3 and 25-28 and Column 12, lines 27-34). Blunt is silent as to incorporating (e.g. by grafting) a polar monomer into the copolymer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate (e.g. by grafting) into the olefin copolymer taught by Blunt a polar monomer such as one suggested by either Roberts or Tomita et al. to form a resin composition having improved adhesiveness. As to the specific amount of polar monomer, one of ordinary skill in the art at the time the invention was made would have readily appreciated determining the optimum amount to give the resin a desired adhesiveness as determining this parameter is well within the ordinary skill of one in the art and would not require anything more than routine experimentation.

Roberts discloses modifying copolymers, including those taught by Blunt, to include a polar monomer. Roberts teaches incorporating a polar monomer into the copolymers improves their adhesiveness (Column 1, lines 10-32). Tomita et al. disclose modifying copolymer such as olefin copolymers with a polar monomer such that the adhesiveness of the copolymers is improved. Tomita et al. teach the polar monomer is present in an amount greater than 1%

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(Column 1, lines 8-25 and Column 2, lines 59-68 and Column 3, lines 1-5 and Column 9, lines 40-46 and Column 11, lines 49-60).

Regarding claims 2, 3, and 8-10, it is well known in the art to optimize parameters such as those claimed (e.g. glass transition temperature, molecular weight distribution, etc.) such that absent any unexpected results one of ordinary skill in the art at the time the invention was made would have readily appreciated optimizing the claimed variables as doing so would have required nothing more than ordinary skill and routine experimentation.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blunt, Roberts, and Tomita et al. as applied above in paragraph 4, and further in view of Akazawa et al. (JP 63-378).

Blunt, Roberts, and Tomita et al. teach all of the limitations in claims 15 and 16 except for a specific teaching of using maleic anhydride as the polar monomer. However, it is noted that Roberts generally teaches using anhydride as the polar monomer (Column 3, lines 26-27), Blunt as modified by Roberts or Tomita et al. are not limited to any particular polar monomer, and maleic anhydride is a well known polar monomer used in graft polymerization of copolymers such as those taught by Blunt. One of ordinary skill in the art at the time the invention was made would have readily appreciated using as the polar monomer taught by Blunt as modified by Roberts or Tomita et al. maleic anhydride as maleic anhydride is a well known polar monomer used in graft polymerization of olefin copolymers as shown for example by Akazawa et al.

Akazawa et al. are directed to graft polymerization of an olefin resin with a monomer such as maleic anhydride to increase the adhesiveness of the resin (See abstract).

Response to Arguments

6. Applicant's arguments filed 3/18/03 have been fully considered but they are not persuasive. Applicant argues Blunt fails to teach the claimed molar ranges. It is noted Blunt teaches a copolymer comprising a first α -olefin of a crystallizable copolymer such as ethylene and a second α -olefin having 2 to 20 carbon atoms wherein the second α -olefin is present in an amount of 2 to 25 mole percent such that the first α -olefin would be present in an amount of 75 to 98 mole present. Applicant further argues Blunt does not teach the claimed crystallinity properties. It is noted Blunt teaches the copolymer has a crystallinity less than 90%. Applicant further argues Blunt does not teach graft modification of the copolymer. It is noted Roberts and Tomita et al. are cited to teach incorporating (e.g. by grafting) into the copolymer taught by Blunt a polar monomer to form a resin composition having improved adhesiveness.

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Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L. Goff whose telephone number is 703-305-7481. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John L. Goff
May 28, 2003



Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700